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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,960	05/01/2001	Hideo Takiguchi	862.1336 D1	5111
5514	7590	06/17/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			JANKUS, ALMIS R	
			ART UNIT	PAPER NUMBER
			2672	

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/845,960	Applicant(s) TAKIGUCHI ET AL.	
	Examiner Almis R. Jankus	Art Unit 2671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-61,80-86,99-105,117,118 and 123-147 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-61,80-86,99-105,117,118 and 123-147 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/25/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicants' amendment has been fully considered by the examiner in preparing this Office Action.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2671

3. Claims 36-61, 80-86, 99-105, 117-118, 123-147 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlin et al. and further in view of Mackinlay et al.

Claim 36 requires "A hierarchical data display method for displaying hierarchically-managed data items, comprising steps of: dividing a display area into an area in which a data icon representing a data item belonging to one level is displayed, and an area in which a data icon representing a data item belonging to a child level is displayed; and displaying said data icons with a size varied depending on a hierarchical depth and at a position so that a hierarchical relation between said data icons is represented as a nesting shape."

In the instant specification, at figure 3, and at page 45 lines 13-14, applicants indicate that "Squares 2a and 2b and other squares [of figure 3] represent data items (or may be referred to as data icons)." From this explanation and other descriptions and drawings of this specification it is understood that a "data icon" is an area on the screen which represents data items (for example, text, pictures, graphics, etc.), by either displaying the actual data or a portion thereof, a modified version of the data, or some other mark which is representative of the data, within that area. A "display area" is understood to include either the whole display screen, the portion of the display screen on which a "data icon" is displayed, any other portion of the screen, or any combination of the above.

It is further understood that the claimed "one level" "data icon" and "child level" "data icon" represent data which are hierarchically related; the relationship expressed

by size variation and nested positioning. With respect to the claimed "hierarchical depth", the claim is not specific as to the sense of "depth", however, it is inherent in any hierarchical relationship with multiple levels, that it has order of rank; therefore, rank and depth are considered tantamount.

Perlin et al. teach the claimed invention at pages 57-64. At page 60, figure 3, Perlin et al. teach the claimed "data icon representing a data item belonging to one level", as the larger rectangle with the year-text "1992" representing the year 1992, the "one level" as the "year"-level in the temporal hierarchy of year-month; "a data icon representing a data item belonging to a child level", as the smaller rectangle with the month-text "Jan" representing the month January, the "child level" as the "month"-level in the temporal hierarchy of year-month ("month" being the child of the "year" in the temporal hierarchy); "a size varied depending on a hierarchical depth", the "1992"-data icon being larger than the "Jan"-data icon, with "1992" and "Jan" being at different depths in the temporal hierarchy of year-month; "and at a position so that a hierarchical relation between said data icons is represented as a nesting shape", with the "Jan"-data icon being positioned such that it is inside (nested) the "1992"-data icon, representing the temporal hierarchical relationship that the month January is contained in the year 1992.

While Perlin et al. teach most claimed features as outlined above, it is noted that data icons, at least including a data icon representing a data item belonging to a child level and another data icon representing a data item belonging to a level lower than the

child level , are displayed, is not explicitly taught. However, Mackinlay et al. teaches these features at figure 3.

It would have been obvious to one of ordinary skill in the art to combine the references because, as Mackinlay et al. explain, "Since the hierarchy of calendars nests one inside the other, we reasoned that interactive animation might allow the user to quickly zoom and pan over these nested views in an interface similar to Perlin's PAD system".

Claims 49 and 125 are similar to claim 36 with the exception that the claims' preambles recite a browser system. Although this limitation is given no patentable weight because it merely recites a use or purpose of the claimed invention; and the body of the claim following the preamble is a self-contained description and does not depend on the preamble for completeness, Perlin et al. teach navigating by peering and roaming over different parts of the data, at the abstract, which corresponds to browsing.

Claim 117 is similar to claim 36 but further requires a computer program product comprising a computer usable medium having computer readable program code means for displaying hierarchically-managed data items. Perlin et al. teach this at pages 61-62 at section 4.

Claim 80 requires an image editing method for a hierarchical data management system for managing a plurality of data items hierarchically, comprising steps of:

displaying data icons serving as data identification information with a size made different in hierarchical order; accessing data corresponding to a desired data icon by designating said desired data icon; and displaying a data icon representing data whose access frequency is relatively larger with a relatively larger size. These features are similar to those presented above with the exception of the size being related to access frequency. Perlin et al. Teach this feature as semantic zooming at page 58, section 1.3 and at the abstract. Each time a user clicks on an object he sees an enlarged representation. Thus, the more accesses (clicks), the greater the magnification.

Claims 99 and 123 are rejected under the same rationale applied to claim 80.

Claim 126 requires a hierarchical data display method of displaying hierarchically managed data items, comprising the steps of: setting exclusively in a background indicating the parent level, a first area in which data item(s) belonging to a parent level is displayed and a second area in which data item(s) belonging to a child level is displayed, in a display area of every level; and controlling a display of data icons respectively representing the data items in each of the areas. Perlin et al. Teach the setting exclusively in a background indicating a parent level as the Pad information plane, as explained in the abstract; a first area being the screen, as explained at section 1.2 at page 57; and a second area in which data items belonging to a child level is displayed, corresponding to Perlin's portals, at page 57 section 1.2; in a display area of

every level, at the abstract, and at page 59 figure 1; and controlling the representations, at pages 57-58.

While Perlin et al. teach most claimed features as outlined above, it is noted that controlling a display so that when designating a data icon, detail information of data identified by the designated data icon is displayed; when designating a display area, the designated display area is zoomed up and a data icon representing data items belonging to a level of the designated display area is displayed, and when designating the zoomed up display area for zoom out operation, a zoom out from the zoomed up display area to the display area of parent level is performed, is not explicitly taught.

However, Mackinlay et al. teaches these features at figure 3.

It would have been obvious to one of ordinary skill in the art to combine the references because, as Mackinlay et al. explain, "Since the hierarchy of calendars nests one inside the other, we reasoned that interactive animation might allow the user to quickly zoom and pan over these nested views in an interface similar to Perlin's PAD system".

Claims 136, 146 and 147 are rejected under the same rationale applied to the rejection of claim 126.

Claims 37 and 50 require as said hierarchical depth increases, said data icon size is decreased. Perlin et al. Teach this at figures 2-4.

Claims 38 and 51 as said hierarchical depth increases, said, data icons are simplified more greatly. Perlin et al. Teach this at page 62 section 4.1.

Claims 84 and 103 require a data icon belonging to a level subordinating a marked level is vignettied and displayed. Perlin et al. Teach this at section 4.1.

Claims 85 and 104 said vignetting is achieved by enlarging raw data representing the number of pixels smaller than the number of pixels to be displayed. Perlin et al. Teach this at section 4.1.

Claims 86 and 105 require a data icon belonging to a higher level is vignettied more intensely. Perlin et al. Teach this at section 4.1.

Claims 135 and 145 require a size of each data icon is determined corresponding to the number of the data items. Perlin et al. Teach this at figures 2-4.

Claims 39, 52, 127 and 137 require said sizes of said division areas are determined on the basis of the number of data items belonging to one level and the number of data items belonging to child levels. This can be seen at figures 2-4 at Perlin et al. Note in figure 3 that 1992 level has a size according to the number of months

(child levels) that it contains; and the child levels have a size according to the month identifiers which they contain.

Claims 40, 53, 128 and 138 require when there are a plurality of child levels, a display area for each child level is determined according to the number of data items belonging to levels subordinate to said child level. Perlin et al. Teach this at figures 2-4.

Claims 41, 54, 129, and 139 require said child levels are displayed in a background expressing a parent level, and said background is selected and displayed so that a hierarchical depth can be distinguished. Perlin et al. Teach this at figures 2-4 and at the abstract.

Claims 42, 55, 130 and 140 require as said hierarchical depth increases, said background is displayed in a deeper color. This is inherent regarding any color because, by definition, a deeper hierarchical depth will be associated with some color, the color being deeper by virtue of being at a deeper hierarchical depth.

Claims 43, 56, 45, 58, 133, 143, 102, 83, require a step of zooming in a desired level by performing a given operation after designating a display area for said desired level; zooming out a level zoomed by performing said given operation so as to display a parent level; zooming in a desired level by performing a given operation, wherein when a zoom out is instructed in the desired level, the display of items are controlled so that

data items belonging to parent level(s) of the desired level are displayed; wherein when said zoom-in means is selected, said zoom direction is a direction toward a deeper position in a hierarchy, and when said zoom-out means is selected, said zoom direction is a direction toward a shallower position in said hierarchy; wherein a level or data icon is zoomed in, panned, or zoomed out by varying said icon display size and data icon display position. Perlin et al. Teach these features as semantic zooming and navigating using portals, at the whole article.

Claims 44, 57, 132, 142 require displaying the detailed contents of a desired level by performing a given operation after designating a display area for said desired level; and zooming in a desired level by performing a given operation, wherein when a zoom up is instructed in the desired level, the detailed contents of the desired level are displayed. Perlin et al. Teaches this at figures 2-4.

Claims 46 and 59 require grouping a plurality of desired data icons, and displaying a leading data icon in such a way that it can be recognized that a plurality of desired data icons are grouped together. Perlin et al. Teach this at figures 2-4. Note the grouping of month data icons grouped together with the leading data icon "1992".

Claims 47 and 60 require displaying a list of said plurality of data icons grouped together. Perlin et al. Teach this at figures 2-4. Note the list of months data icons.

Claims 48 and 61 require rearranging a plurality of data icons grouped together, a step of releasing a group, and a step of deleting a desired data icon from a plurality of data icons grouped together. Perlin et al. Teach this at page 60 as the ephemeral database manager.

Claims 81 and 100 require an access frequency meaning the number of accesses gained to data is included in said data attributes, and a data icon representing data whose access frequency is relatively large is displayed with a relatively large size. Perlin et al. Teach this feature as semantic zooming at page 58, section 1.3 and at the abstract. Each time a user clicks on an object he sees an enlarged representation. Thus, the more accesses (clicks), the greater the magnification.

Claims 82 and 101 require when said data icon displayed with a relatively large size is not accessed for a period of time exceeding a certain period, said data icon is reduced in proportion to said period during which said data icon is not accessed or an access frequency of another data. Perlin et al. Teach this at page 60 with individual display items being ephemeral. Further, the claims suggest that a non-accessed data icon is reduced proportion to one which has an access frequency (presumably higher access frequency). If this is the case, then a non-accessed data icon could remain the same size while the accessed data icon increases in size with each click, making the non-accessed data icon proportionately smaller relative to the accessed data icon, but the same size relative to itself.

Claim 124 requires said computer usable medium further having a hierarchical data and an access frequency data. Perlin et al. Teach this at page 61 section 3.3.

Claim 118 requires said computer usable medium further having a hierarchically-managed data. Perlin et al. Teach this at the abstract.

Claims 134 and 144 require judging whether a remaining area is left in which the first and second areas have not been set, wherein the first and second areas are set in the remaining area when the remaining area is left. Perlin et al. Teach this at pages 57-58 at section 1.2.

Perlin et al. teach the features of claims 131 and 141 at figures 3 and 4.

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See

MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Almis R. Jankus whose telephone number is 571-272-7643. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-7643.

Art Unit: 2671

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AJ



ALMIS R. JANKUS
PRIMARY EXAMINER